

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): An ADPCM decoder, wherein comprising:

an adaptive predictor which calculates ~~[[the]]~~ a prediction signal from a quantization difference signal, the quantization difference signal including a mantissa part and an exponent part, the adaptive predictor including comprises ~~[[the]]~~

bit developing means which receives said quantization difference signal ~~separated into a~~ mantissa part, ~~and an exponent part and~~ which bit-develops said mantissa part, ~~[[the]]~~

bit shifting means which bit-shifts said bit-developed mantissa part in accordance with a value of said exponent part, ~~[[the]]~~

overflow detecting means which is ~~added to the~~ disposed as a most significant bit of said bit developing means and detects an overflow of said bit-shifted mantissa part, ~~[[the]]~~ and

prediction signal output means which, when said overflow detecting means detects the overflow of said bit-shifted mantissa part, replaces said ~~[[bit-developed]]~~ bit-shifted mantissa part with a predetermined upper limit value and outputs ~~[[it]]~~ said predetermined upper limit value as said prediction signal, and ~~[[the]]~~ when the overflow of said bit-shifted mantissa part is not detected, outputs said ~~[[bit-developed]]~~ bit-shifted mantissa part as it is as ~~[[a]]~~ said prediction signal; and

an adder which adds said prediction signal and said quantization difference signal to provide a reproduction signal that corresponds to a decoded signal.

Claim 2 (Currently amended): The decoder ~~detector~~ according to claim 1, wherein said prediction signal output means is a selector which receives said predetermined upper limit value ~~[[from]]~~ at one input terminal and said ~~[[bit-developed]]~~ bit-shifted mantissa

part ~~[[from]]~~ at another input terminal, selects said predetermined upper limit value when said overflow detecting means detects ~~[[said]]~~ the overflow, selects said ~~[[bit-developed]]~~ bit-shifted mantissa part when said overflow detecting means does not detect ~~[[said]]~~ the overflow, and outputs the selected predetermined upper limit value or the selected bit-shifted mantissa part from an output terminal.

Claim 3 (Currently amended): An ADPCM decoder, wherein comprising:

an adaptive predictor which calculates ~~[[the]]~~ a prediction signal from a quantization difference signal, the quantization difference signal including a mantissa part and an exponent part, the adaptive predictor including comprises ~~[[;]]~~

bit developing means which receives said quantization difference signal ~~separated into a mantissa part, and an exponent part and~~ which bit-develops said mantissa part, ~~[[;]]~~

bit shifting means which bit-shifts said bit-developed mantissa part in accordance with a value of said exponent part, and ~~[[;]]~~

overflow detecting means which is ~~added to the~~ disposed as a most significant bit of said bit developing means and detects an overflow of said bit-shifted mantissa part; and

muting processing means which, when the overflow of said bit-shifted mantissa part is detected, stops an output of decoding data of said ADPCM decoder.

Claim 4 (Currently amended): An ADPCM decoder, wherein comprising:

an adaptive predictor which calculates ~~[[the]]~~ a prediction signal from a quantization difference signal, the quantization difference signal including a mantissa part and an exponent part, the adaptive predictor including comprises ~~[[;]]~~

bit developing means which receives said quantization difference signal ~~separated into a mantissa part, and an exponent part and~~ which bit-develops said mantissa part, ~~[[;]]~~

bit shifting means which bit-shifts said bit-developed mantissa part in accordance with a value of said exponent part, ~~[[;]]~~ and

overflow detecting means which is ~~added to the~~ disposed as a most

significant bit of said bit developing means and detects an overflow of said bit-shifted mantissa part; [I.I] and

a low pass filter outputting when the overflow of said mantissa part is detected,
decoding data of said ADPCM decoder when the overflow of said bit-shifted mantissa
part is detected is outputted via a predetermined low pass filter.